UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/663,381	09/15/2003	Andy Kazmierczak	DJORTH.220A	1613	
	7590 01/02/200 RTENS OLSON & BE	=	EXAM	INER	
2040 MAIN STREET ALI, SHUMAYA B			МАҮА В		
FOURTEENTI IRVINE, CA 92			ART UNIT	PAPER NUMBER	
,		-	3771		
			NOTIFICATION DATE	DELIVERY MODE	
			01/02/2008	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com eOAPilot@kmob.com

	H		
· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)	
•	10/663,381	KAZMIERCZAK ET A	L.
Office Action Summary	Examiner	Art Unit	
	Shumaya B. Ali	3771	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	vith the correspondence addre	ess
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN .136(a). In no event, however, may a d will apply and will expire SIX (6) MO te, cause the application to become A	ICATION. a reply be timely filed  ONTHS from the mailing date of this comm ABANDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on 29 L     This action is FINAL. 2b) ☑ Thi     Since this application is in condition for allowated closed in accordance with the practice under	is action is non-final. ance except for formal ma	· · · · · · · · · · · · · · · · · · ·	erits is
Disposition of Claims			
4) ⊠ Claim(s) 1-13 and 15-28 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1-13,15-28 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin 10) The drawing(s) filed on 26 July 2004 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	)⊠ accepted or b)⊡ obje e drawing(s) be held in abeya ction is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list	nts have been received. Its have been received in a printy documents have been au (PCT Rule 17.2(a)).	Application No n received in this National Sta	age
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	Paper No 5) Notice of	Summary (PTO-413) s(s)/Mail Date Informal Patent Application of 0362528 JP 2001-299789.	

#### **DETAILED ACTION**

### Status of Claims

In response to the office action mailed on 11/29/06, Applicant has amended claim 7. Claim 14 is previously cancelled. Currently claims 1-13, and 15-28 are pending in the instant application.

## Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-12, 22, 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7 line 6, "a plurality of straps" and in line 10 "a forth one of the straps" are indefinite. It is not clear whether the fourth strap is the highest or lowest number of straps limited by the "plurality of straps". Furthermore, two straps are considered a "plurality of straps". In this regard "a fourth one of the straps" is not supported by "plurality of straps" and therefore, lacks antecedent basis. Furthermore, by reciting "a forth one of the straps" it is not clear whether the first, second, and third straps are also claimed and how do these straps (first, second, and third) are assembled and positioned of said straps with respect the pillow and wearer is not clear.

In claim 10, line 14, "a medial surface thereof" is indefinite. Exact location limited by the term "thereof" is not clear.

In claim 22, line 1-4, "the support pillow occupies a first orientation it is adapted to support the wearer's right arm, and when the support pillow is inverted from the first orientation it is adapted to support the wearer's left arm" is indefinite. It appears the Applicant is claiming a method step. What structure is needed to occupy pillow at a first orientation and to invert the pillow is not clear.

In claim 26, line 2 "indicator line is positioned" is indefinite. It appears that Applicant is claiming a method step. What structure is required to position the indicator line is not clear.

In claim 27, line 2 "indicator line is arranged" is indefinite. It appears that Applicant is claiming a method step. What structure is required to arrange the indicator line is not clear.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Tatsuya et al. JP 2001-299789 A1.

As to claim 15, Tatsuya in his specification and drawings (see figures 1-6) teaches a shoulder sling. Tatsuya in figures 2,5, and 4 (a-d) show a wedged shape support pillow (1) that is positioned between a wearer's arm and body that supports the wearer's arm at desired angles of abduction and external rotation. Tatsuya further discloses the support pillow includes a

10/663,381 Art Unit: 3771

contoured medial surface (D) abutting the wearer's torso, and a lateral surface (F in figure 4(b)) contacting and supporting the wearer's arm. Tatsuya further discloses a plurality of straps (10, 13, 16) securing the support pillow to the wearer. The pillow (1) as positioned in figures 4 (a and b) shows a distance between anterior edges (length of E between F and C) of the medial and lateral surfaces (respectively surfaces C and F) is substantially greater than a distance between posterior edges (length of B between the medial (C) and lateral (F) surfaces) of the medial and lateral surface. Such dimension of the pillow allows wearer's arm to be maintained in a position of external rotation.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuya et al. JP 2001-299789 A1 in view of Gaylord US 6,659,971 B2.

10/663,381

Art Unit: 3771

As to claim 1, Tatsuya in his specification and drawings (see figures 1-6) teaches a shoulder sling. Tatsuya in figures 2,5, and 4 (a-d) show a wedged shape support pillow (1) that is positioned between a wearer's arm and body that supports the wearer's arm at desired angles of abduction and external rotation. Tatsuya further discloses the support pillow includes a contoured medial surface (D) abutting the wearer's torso, and a lateral surface (F in figure 4(b)) contacting and supporting the wearer's arm. Tatsuya further discloses a plurality of straps (10, 13, 16) securing the support pillow to the wearer. The pillow (1) as positioned in figures 4 (a and b) shows a distance between anterior edges (length of E between F and C) of the medial and lateral surfaces (respectively surfaces C and F) is substantially greater than a distance between posterior edges (length of B between the medial (C) and lateral (F) surfaces) of the medial and lateral surface. As shown in figure 4 (b), such dimension of the pillow allows wearer's arm to be maintained in a position of external rotation.

Tatsuya however lacks a pouch and the straps securing the pouch to the wearer. However, Gaylord in a shoulder abduction sling teaches a pouch (fig. 3, 30) attached to a support pillow's lateral side (fig. 4, 23) with a hook and loop type material (38). Gaylord further teaches securing straps (fig. 4, 76, 77, 65) that secure the pouch to the wearer (see fig. 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuya in order to provide a pouch for the purposes of receiving and supporting wearer's arm (see col. 6, lines 35 and 36 of Gaylord) and provide straps for the purposes of securing the pouch to the wearer as taught by Gaylord. Furthermore, one of ordinary skill in the art would be motivated to use a pouch to secure the arm to the pillow instead of straps (10) of Tatsuya because straps (10) would likely to leave pressure marks on the arm after a long day use of the shoulder

sling. Thus, providing a pouch instead of the straps (10) to support the arm would enhance wearer's comfort.

As to claims 2 and 3, the size and shape (for example wider anterior medial and lateral surface and narrower posterior medial and lateral surface), the angle of abduction shown in figure 2, and the position of pillow as shown in figures 4 (b) and 5 (a, b) of Tatsuya show the support pillow can be arranged and/or positioned in a way that can retain the wearer's arm in a position of approximately 15 degrees of abduction and approximately 15 degrees of external rotation and approximately 15 degrees of abduction and approximately 30 degrees of external rotation

As to claim 4, Tatsuya lacks a first one of the straps comprises a torso strap that extends from the support pillow adjacent the anterior edge of the medial surface to the support pillow adjacent the posterior edge of the medial surface. However, such arrangement of strap is taught by Gaylord. Gaylord teaches claimed strap (42, 46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuya in order to provide a first strap that is positioned as claimed for the purposes of securing the pillow to wearer's torso as taught by Gaylord (see figures 1, 7, and 9).

As to claim 16, Gaylord teaches a pouch as applied to claim 1.

As to claim 17, Gaylord teaches a first one of the straps as applied for claim 4.

As to claim 18, Tatsuya lacks a shoulder pad. However, Gaylord teaches a shoulder pad (fig.1, 80). Therefore, it would have been obvious to one of ordinary skill in the art at the time

10/663,381

Art Unit: 3771

the invention was made to modify Tatsuya in order to provide a shoulder pad so that when the strap arrangement is such that it runs over the shoulder, having a pad in between strap ends as taught by Gaylord would allow distribution of force evenly across the straps, thereby enhance wearer's comfort. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a shoulder pad since the padding would inherently add comfort to the shoulder area when carrying a load supported by the shoulder.

Claims 5,6,13,19,20,23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuya et al. JP 2001-299789 A1 in view of Gaylord US 6,659,971 B2 and in view of Schaefer US 4,598,701.

As to claim 5, Tatsuya lacks a shoulder pad. However, Gaylord teaches a shoulder pad as applied for claim 17. Gaylord further teaches a second one of the straps (65) comprises a chest strap; however lacks the second strap extends from an anterior surface of the support pillow to an anterior edge of the shoulder pad. However, Schaefer in figure 1 teaches a strap (24) that extends from a shoulder point to a point located at the anterior edge of a support pillow (A). Although Schaefer does not teach the one end of the strap extends to an anterior edge of a shoulder pad, however, by looking at the attachment point by the shoulder, it would have been obvious to one of ordinary skill in the art to attach one end of the strap to the anterior edge of the shoulder pad. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gaylord in order to provide a second strap and position the strap as claimed for the purposes of aligning and securing pillow with respect to wearer's torso.

As to claim 6, Tatsuya lacks a third strap comprises a back strap that extends from a posterior edge of the pouch to a posterior edge of the shoulder pad. However, Gaylord teaches a back strap (55) and its arrangement as claimed (see figures 1 and 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuya in order to provide a third strap as claimed for the purposes of securing the pouch with respect to wearer's body as taught by Gaylord.

As to claim 13, Tatsuya as modified by Gaylord discloses a shoulder sling as applied for claim 1. Tatsuya as modified however lacks an upper surface of the support pillow includes a straight indicator line. However, Schaefer teaches horizontal strips (see fig.4, reference objects 18-20) attached to the upper surfaces of an abduction pillow for properly securing and adjusting the straps (see col.3 lines 10-15). The horizontal strip of Schaefer inherently ensures user where to secure the straps to, thus act as an indicator line for the user to ensure proper fit of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tatsuya in view of Schaefer in order to add horizontal strips/straight indicator lines for the purposes of providing a visual cue so that the wearer knows the exact locations of the straps, thereby ensuring proper fit of the sling as taught by Schaefer.

As to claim 19, Tatsuya as modified teaches a second one of the straps as applied for claim 5.

As to claim 20, Tatsuya as modified teaches a third one of the straps as applied for claim 6.

As to claim 23, Tatsuya as modified teaches the claimed invention as applied for claims 1, and 4-6.

As to claim 25, Tatsuya lacks a buckle. Gaylord teaches the torso strap further comprises a buckle (fig.1,47) adapted to quickly secure the torso strap about the wearer's torso and quickly release the torso strap from the wearer's torso. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuya in order to provide a buckle to the torso strap for the purposes of allowing quick securement and detachment of the strap to the wearer's torso as taught by Gaylord.

as to claim 26, Schaefer's indicator line is positioned on the outer surface of a pillow (see figures 4 and 5, reference numbers 13,14, and 18-20), which is easily seen by a wearer, thus provides a visual cue to the wearer so that the wearer knows where to secure strap ends. Thus the indicator line is capable of ensuring that the pillow is properly fitted to the wearer. Once the straps are properly secured to the body, the shape and position of Tatsuya's pillow inherently maintains the wearer's arm in a position of external rotation.

As to claims 27 and 28, Tatsuya in view of Gaylord teach pillow and strap arrangement that maintains wearer's arm in a position of external rotation. Schaefer's indictor line (see figures 4 and 5, reference numbers 13,14, and 18-20) on Tatsuya's pillow ensures wearer where the ends of the straps would likely to be attached, thus, further ensures fitting of the sling. Once the straps are secured at the right attachment point, at least one of the attachment points inherently becomes generally parallel to an orthogonal direction/a medial-lateral axis of the wearer's body. Once the

straps are properly secured to the body using the indicator line, the shape and position of Tatsuya's pillow inherently maintains the wearer's arm in a position of external rotation.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuya et al. JP 2001-299789 A1 in view of Gaylord US 6,659,971 B2 and in view of Scott US 4,896,660.

As to claim 10, Tatsuya as modified by Gaylord teaches the claimed invention as applied for claim 1, 5, and 6. Notice, the "second one of the straps" of claim 5 and "third one of the straps" of claim 6 respectively reads on "a first one of the straps" and "a second one of the straps" of claim 10. Tatsuya as modified however lacks a third one of the straps that comprises an anti-rotation strap that extends from an anterior edge of the shoulder pad to the support pillow adjacent a medial surface thereof. However, Scott in figure 1 shows an antiroation strap (34), which extends from an anterior end of a shoulder pad (12) to a medial surface (28) of a pillow. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tatsuya in view of Gaylord in order to provide an antirotation strap and position of this strap as claimed for the purposes of limiting rotation of the pillow and securing pillow to the wearer.

As to claim 11, Tatsuya teaches a torso strap as applied to claim 4.

Claims 12, 21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuya et al. JP 2001-299789 A1 in view of Gaylord US 6,659,971 B2 and in view of Bastyr et al. US Patent 5,407,420.

10/663,381

Art Unit: 3771

As to claims 12, Tatsuya lacks a resilient compressible member secured to an anterior surface of the support pillow. However, at the time of the invention a resilient compression member such as a bolster/resilient ball used with a shoulder immobilizing device is known to one of ordinary skill in the art. Bastyr teaches an adjustable brace that provides stabilization and immobilization of the shoulder following injury comprising a spherical foam hand bolster attached to the distal end (anterior surface) of a forearm cuff to provide support for the hand and a means for exercising the arm while the shoulder is immobilized by firmly gripping the bolster with the hand (see fig.1 reference object 40, col.4 lines 64-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a resilient compressible member to the pillow of Tatsuya for the purposes of providing a means for exercising the arm while the shoulder is immobilized by firmly gripping the bolster with the hand as taught by Bastyr.

As to claims 21 and 24, Tatsuya as modified teaches resilient compressible member as applied to claim 12.

Claim 22 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tatsuya et al. JP 2001-299789 A1.

As to claim 22, Tatsuya in figures 3-6 shows first orientation of the pillow where the pillow supports wearer's right arm. Tatsuya however is silent on a second orientation that is adapted to support the wearer's left arm. However, it is inherent that body is symmetrical with respect to a midline longitudinally dividing the body in halves. Therefore, it would have been obvious to one of ordinary skill in the art that a pillow supporting right arm inherently capable of

supporting the left arm. Furthermore, to provide the left arm with a similar orientation of the pillow as shown in figure 4 (b) for right arm, it would have been obvious to one of ordinary skill in the art to invert the pillow so that surface G becomes the top surface, and surface A becomes the bottom surface, and E remains the front surface. The orientation of the pillow for left arm is the second orientation.

#### Allowable Subject Matter

The indicated allowability of claims 7-9, 13, and 26-28 is withdrawn in view of the new grounds for rejection. Claims 7-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action because the prior art ore record does not teach nor render obvious the over all claimed combination of "an autorotation strap that extends from an anterior edge of a shoulder pad to the support pillow adjacent the posterior edge of the medial surface" as cited in claim 7.

The indicated allowability of claims 10-13, and 26-28 is withdrawn in view of the newly discovered reference(s) to Tatsuya JP 2001-299789. Rejections based on the newly cited reference(s) explained above.

#### Response to Arguments

Applicant's arguments with respect to claims 1-13, and 15-28 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art made of record cited in the PTO form 892 teaches shoulder sling.

10/663,381

Art Unit: 3771

Page 13

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The

examiner can normally be reached on M-W-F 8:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shumaya B. A

Examiner

Art Unit 3771

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3700

ECHNOLOGY CENTER 3

12/18/07